DETAILED ACTION

Response to Amendment

1. Claims 1, 12, 20-25, 30, 33, 38, 46 and 51 are amended; claims 13, 31, 32, 44, 45 and 57 are cancelled.

2. Claim objections, on claims 12, 13, 32, 44, 45, 57 and 58 are withdrawn since they are being amended accordingly.

3. Claim rejection under U.S.C 112 second paragraph, on claims 1-6, 11-13, 20-25, 30-38, 43-51 and 56-58 are withdrawn since they are being amended accordingly.

4. Claim 1 is amended by incorporating allowable subject matter claim 13, claim 29 is amended by incorporating allowable subject matter claim 32; claim 33 is amended by incorporating allowable subject matter claim 45; claim 46 is amended by incorporating allowable subject matter claim 58.

EXAMINER'S AMENDMENT

5. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Zhichong Gu on October 15, 2008.

The application has been amended as follows:

- **Claim 20**, line 2, "computer-readable medium **carrying**" has been replaced with -- computer-readable medium **storing** --
- **Claim 58** is canceled.

Response to Arguments

6. Claims rejection under U.S.C 101, Claims 20-25 and 30-32 are withdrawn since they are being amended accordingly.

7. Applicant's arguments, see pages 10-14, filed 7-10-08, with respect to claims 1, 2-6, 11, 12, 20-25, 30, 33-38, 43, 46-51, and 56 have been fully considered and are persuasive since independent claims 1, 20, 33 and 46 have been rewritten into independent form by incorporating allowable subject matter of claims 13, 32, 45 and 58, respectively. The 35 U.S.C 103 (a) rejections of claims 1, 2-6, 11, 12, 20-25, 30, 33-38, 43, 46-51 have been withdrawn.

Allowable Subject Matter

8. Claims 1, 2-6, 11, 12, 20-25, 30, 33-38, 43, 46-51, and 56 allowed.

9. The following is an examiner's statement of reasons for allowance:

Claims 1, 2-6, 11, 12, 20-25, 30, 33-38, 43, 46-51, and 56 are allowable over prior art since none of the prior art taken individually or in combination fails to particularly disclose, fairly suggests, or render obvious the following *italic* limitations, which are previously recited in dependent claims 13, 32, 45 and 58:

In claims 1, 20, 33, and 46...*determining said link size of said link is based on product of*

a state probability...is a probability that a specific number of uses are using said link when a specified maximum call blocking probability is satisfied relative to said link

and

a marginal packet loss probability...is a probability that a packet is lost when said packet sent through said link that has a specified amount of bandwidth and is being used by said specific number of users... in combination with other recited limitations in Claims 1, 20, 33 and 46.

Note that the closet prior arts disclose as follows:

Soumiya (US 5,583,857) discloses when packet is send through said link (see FIG. 18, 27, a cell is send through link/line; see col. 16, line 46-64; see col. 1, line 50-66) that has a specified amount of bandwidth (see FIG. 2, a link/line has a bandwidth; see col. 3667) and is being used by a specified number of users (see FIG. 18, 27, and utilize by a number of users/subscribers, where each user/subscriber (see FIG. 18), using the link/line, is associated with each call; see col. 7, line 11-16; see col. 7, line 50-60; see col. 9, line 21-40; see col. 10, line 31-40).

Fodor (US 6,788,646) discloses a maximum call blocking probability for said link (see col. 3, line 25-33; see col. 10, line 8-38; predetermines/specifies call blocking probability, B^{max}, for the link/line) and determining, for each of one or more candidate link sizes of said link (see col. 3, line 10-15,34-45,60 to col. 4, line 2; col. 10, line 1-6, 33 to col. 11, line 9; selecting/determining potential/candidate link/line bandwidth/size), a plurality of state probabilities (see col. 10, line 1-6, 33 to col. 11, line 9; see col. 13, line 5 to col. 15, line 67; system/steady state probability according to Erlang Formula while meeting/satisfying call

blocking requirement); determining comprises selection one of the one or more candidate link sizes of said link, using the probability of state probabilities (see col. 3, line 10-15, 34-4 5, 60 to col. 4, line 2; col. 10, line 1-6, 33 to col. 11, line 9; see col. 13, line 5 to col. 15, line 67; selecting/determining potential/candidate link/line bandwidth/size according to system/steady state probability).

Beshai (IEEE journal) discloses a maximum packet loss probability for said link (see section II, section III B-C, IV, V, Appendix. II, QoS specifics/identifies the overall/aggregate/maximum cell loss probability), and the plurality of marginal packet loss probabilities (see section II; section III B-C, IV, V, Appendix. II, marginal/original probability of packet lost is determined based on QoS), each of the plurality of marginal packet loss probability is a probability that a packet will be lost when said packet is send through a link that: has a specific amount of bandwidth; (see section II, section III B-C, IV, V, Appendix. II; marginal/original probability is a probability of cell lost probability for a cell that will be lost when traverses over the link that has a predefined/specific recourses/capacity capacity/bandwidth, and used by users of the network).

Ishikawa (US 5,838,671) teaches each of the plurality of state probability is a probability that a specified number of users are using said link when a specified maximum call blocking required is satisfied relative to said link (see FIG. 6, state probability is a probability of number connectable users within quality when maintaining/satisfying maximum blocking probability 1%; see col. 9, line 5-20; see col. 12, line 10-50; see col. 16, line 63 to col. 17, line 11).

However, none of the prior arts disclose or render obvious the determining the link size is based on product of a state probability and marginal loss probability described above with ***italic***.

10. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to IAN N. MOORE whose telephone number is (571)272-3085. The examiner can normally be reached on 9:00 AM- 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Trost can be reached on 571-272-7872. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Ian N. Moore
Primary Examiner
Art Unit 2416

/Ian N. Moore/
Primary Examiner, Art Unit 2416